

XXIX.—On the Geographical Distribution of the True Pheasants (*Genus Phasianus sensu stricto*). By S. A. BUTURLIN.

THE true Pheasants (*Phasianus*) are gallinaceous birds with a very long, pointed, and much graduated tail of eighteen feathers. Their splendid plumage is so much alike in general appearance (although variable in details) and they interbreed so freely in a semi-domestic state (as do many other gallinaceous birds), that some eminent naturalists consider them all, or nearly all, to be only climatic or local races of one species.

But if our views on the taxonomic value of wild pure-bred forms are not to be based chiefly on the study of semi-domestic mongrels, we shall not share this view; we shall not call *Ph. scintillans* or *Ph. versicolor* of Japan a "local race" of *Ph. colchicus*, as Japanese and Caucasian birds in a wild state most certainly *do not* interbreed or "frequently merge into one another."

I will take here, as in other cases, for good species such forms as in their wild state do not intergrade with their allies, and for subspecies or geographical races such as, being on the whole quite recognisable and occupying geographically distinct areas, nevertheless do intergrade, as a rule, with closely allied forms.

To describe each form minutely would occupy too much space; but a synoptical table of the adult males of the *Phasiani* may, I think, be useful.

GENUS PHASIANUS.

- I. Head coppery reddish brown; central tail-feathers with very wide-set bars.
  - A. Scapulars, lower back, and rump streaked with golden yellow; broad bars of the tail rusty chestnut, gradually darkening to brown ..... 32. *soemmerringi* [(p. 412).
  - B. Scapulars, lower back, and rump streaked with white; broad bars of the tail half white, dotted with black ..... 33. *scintillans* (p. 412).
  - C. Scapulars with narrow purplish-black edges; lower back and rump pure white. 34. *ijimaë* (p. 413).

- II. Crown and throat white; tail not widely barred ..... 35. *reevesi* (p. 413).
- III. Crown more or less greenish, yellowish, olive-brownish, or greenish bronze; central tail-feathers with black bars not wide apart.
- D. Lower back, rump, and upper tail-coverts of a bronze-red, maroon, or rusty-orange general colour, sometimes glossed with oily-green; black bars on the tail generally narrow.
- a. Wing-coverts sandy brown or sandy rufous.
- a. Margins of the feathers of rump and upper tail-coverts green and buff; chest-feathers not margined with black ..... 16. *tarimensis* (p. 397).
- β. Margins of the feathers of rump and upper tail-coverts coppery maroon; chest-feathers margined with black.
- a'. Middle of breast and sides of belly purplish red-bronze; centre of belly and under tail-coverts lighter, more rusty brown; black margins of chest- and breast-feathers narrow and glossed with dark blue.
- a'. Wing-coverts and tail darker; chest-feathers more pointed and more deeply emarginated, black margins narrower ..... 4. *talischensis* (p. 386).
- β'. Wing-coverts and tail lighter; chest-feathers more rounded and less emarginated, black margins wider ..... [(p. 386).
3. *lorenzi*, subsp. n.
- δ'. Middle of breast and sides of belly dark purplish green; centre of belly and under tail-coverts darker, blackish brown; chest- and breast-feathers broadly tipped with black.
- γ'. General colour paler, more golden orange; black markings of mantle, chest, and flanks glossed with green; sides of neck with hardly any purple-blue gloss ..... 2. *septentrionalis* [(p. 385).

- $\delta'$ . General colour darker, more intense coppery red; black markings of mantle, chest, and flanks glossed with greenish blue or purple, as the sides of neck ..... 1. *colchicus* (p. 385).
- b.* Wing-coverts white, yellowish white, or silvery grey.
- $\gamma$ . Middle of breast and sides of belly dark green; centre of belly brownish black.
- $c'$ . Throat coppery maroon; a white collar.
- $e'$ . White collar wide and complete or nearly complete in front; maroon colour of the throat divided from the cheeks by a streak of bluish green; crown, nape, and hind-neck with prevailing green gloss; forehead, sides of neck, and tips of throat-feathers with prevailing greenish-blue gloss; chest and mantle with prevailing bluish and purplish gloss; middle of breast green; black markings of flanks purplish and greenish blue ..... [(p. 396). 14. *turcestanicus*
- $\eta'$ . White collar narrower and more interrupted in front; only the very tips of the maroon feathers bordering the cheeks below with light greenish gloss; prevailing metallic gloss purple and bronze on the crown, nape, and hind-neck, dark yellowish green on forehead, bronzy green on sides of neck and on tips of throat-feathers, as also on chest, mantle, and middle of breast; black markings of flanks glossed with green.
- $a''$ . Collar wider and less interrupted; wing-coverts without blackish centres or only slightly clouded ..... 13. *mongolicus* (p. 395).

- b''*. Collar very narrow or nearly wanting and widely interrupted in front ; hidden centres of wing - coverts clouded with blackish . . . . . [(p. 396).  
15. *semitorquatus*
- d'*. Throat dark green ; no white collar or only slight traces of it.
- θ'*. Flank-feathers narrowly tipped, those of the chest, breast, and upper back very narrowly edged with black having a purplish-green gloss ; rump-feathers with a subterminal green spot on each side of the shaft ; black tail-bars much broader, wing - coverts somewhat yellowish . . . . . 12. *shawii* (p. 394).
- λ'*. Flank-feathers broadly tipped, those of the chest, breast, and upper back very broadly edged with black having a rich green gloss ; rump-feathers with a triangular green spot at the end of the shafts ; black tail-bars much narrower ; wing-coverts clearer white.
- c''*. Chest and breast considerably lighter, as the coppery-red subterminal part of the feathers is wider and the dark green margins are much narrower . . . . . [(p. 392).  
10. *chrysomelas*
- d''*. Chest and breast considerably darker, as the coppery-red subterminal part of the feathers is narrower and the dark green margins are much broader . . . . . [(p. 393).  
11. *bianchi*, subsp. n.
- δ*. Middle of breast and sides of belly purplish coppery red.
- e'*. Chest- and upper breast-feathers with narrow blackish-blue edges ; centre of belly darker, brownish ; rump more dark coppery red . . . . . 5. *persicus* (p. 387).
- f'*. Only on the sides of chest and breast are the feathers more or less edged with black ; centre of belly light chestnut-red ; rump more golden-orange-red.

- $\mu'$ . White collar incomplete in front and extremely narrow, but quite recognisable; chest- and breast-feathers very narrowly (about  $\frac{1}{16}$  inch broad) tipped with somewhat light purplish red-bronze and often with a narrow blackish-blue apical shaft-streak; scapulars with little of a blackish-blue apical spot, but without or nearly without black margins; flanks spotted with black and purplish blue ..... 9. *zerafshanicus* (p. 391).
- $\nu'$ . Collar extremely narrow and broadly interrupted in front and behind; chest- and breast-feathers widely (about  $\frac{1}{8}$  inch broad) tipped with somewhat dark purplish red-bronze with faint greenish gloss, and on the sides of these parts margined with blackish green; scapulars tipped with blackish-green spots, but with no or hardly any black margins; flanks spotted with blackish green ..... [(p. 390).  
8. *zarudnyi*, nom. n.
- $\pi'$ . Collar absent or only some white spots, as traces of it, visible; chest- and breast - feathers widely (about  $\frac{1}{8}$  inch broad) tipped with somewhat light purplish red-bronze, without greenish gloss and black apical shaft-streaks; scapulars margined and widely tipped with blackish blue.
- $e''$ . Feathers on the sides of breast margined and on the flanks tipped with blackish purplish blue ..... 6. *principalis* (p. 388).
- $f''$ . Feathers on the sides of the breast margined and on the flanks tipped with blackish green or blackish purplish green ..... 7. *komarowi* (p. 388).

- E. Lower back, rump, and upper tail-coverts of a light and more or less dead lavender-blue, greenish- or yellowish-grey, or olive-greenish colour; black tail-bars generally broad.
- c. Chest, breast, and flanks uniformly dark green; sides of rump without a rusty-orange patch ..... 31. *versicolor* (p. 412).
- d. Under parts with more or less golden yellow or copper-red; a rusty-orange patch on each side of the rump.
- e. No white collar or only slight traces of it.
- g'. Dark green of the neck extending to the middle of chest and breast.
- ρ'. Flanks golden buff; mantle bright sandy red; scapulars bright sandy red or light brownish maroon with lighter edges, but not freckled with whitish or blackish in the centres ..... 30. *vlangali* (p. 412).
- τ'. Flanks coppery maroon; mantle maroon, scapulars bright maroon with paler tips and black and buff centres ..... 29. *elegans* (p. 411).
- h'. Dark green of the neck banded in front by the golden yellow, fiery or coppery red of the chest.
- υ'. Chest- and breast-feathers broadly margined with black, this black having a dark green gloss; middle of breast and sides of belly slightly glossed with purplish green; flanks buff .. 26. *decollatus* (p. 409).
- φ'. Chest- and breast-feathers narrowly margined with black; flanks darker.
- g''. Darker; mantle fiery orange with narrow wedge-like apical streaks of blackish green; broad scapular margins dark maroon-red; chest and breast bright fiery chestnut-red, feathers edged with purplish green; flanks bright

- chestnut-red tipped with purplish green; middle of breast and sides of belly dark green; tail more rufous-grey . . . . . 27. *strauchi* (p. 410).
- h". Paler: mantle buffy yellowish with large apical spots of blackish green; broad scapular margins buffy rufous-red; chest and breast rufescent golden, feathers edged with blue; flanks light rufescent golden tipped with blue; tail more whitish grey . . . . . [(p. 411).  
28. *berezowskyi*
- η. White collar present, but narrow, and completely or nearly interrupted in front.
- i'. Chest- and breast-feathers broadly margined with blackish green; general colour very pale.
- χ'. Scapulars margined with sandy brown; general colour of mantle and flanks yellowish buff; chest glossed with pink; rump mostly grey; superciliaries completely or nearly wanting . . . . . [(p. 398).  
17. *satscheuensis*
- ψ'. Scapulars margined with red-maroon; general colour of mantle and flanks very pale primrose; chest slightly glossed with pink; rump more greenish; white superciliaries better marked . . . . . 18. *formosanus* (p. 398).
- j'. Chest- and breast-feathers not margined or very narrowly margined with blackish blue; general colour bright.
- ξ'. Wing-coverts ashy grey; rump mostly grey; whitish superciliaries sufficiently marked; nape somewhat better differentiated from hind-neck by its dull rusty-brownish colour . . . . . [subsp. n. (p. 407).  
24. *kiangsuensis*,
- ζ'. Wing-coverts olive-sandy-grey; rump mostly olive greenish; nape more glossed and scarcely differentiated from the hind-neck.

- i*''. Mantle and flanks paler, golden yellow; superciliaries narrow and dirty, but visible; collar complete behind . . . . . [(p. 408).  
25. *gmelini*, sp. n.
- j*''. Mantle and flanks brighter, golden orange; superciliaries scarcely visible or completely wanting; collar often incomplete behind . . . . . 23. *holdereri* (p. 406).
- θ*. White collar complete and very broad, even in front.
- k*'. Black patch under the ear with a white spot; superciliaries white, broad and nearly meeting in front; general colour of mantle and flanks very pale; scapular margins maroon; chest-feathers with narrow, if any, blackish-blue margins; front and sides of the neck more purplish blue than green.
- s*'. Wing-coverts ashy grey; crown and nape somewhat lighter, slightly more sandy yellow; mantle rather paler, more straw-yellowish; rump somewhat greyer . . . . . [(p. 399).  
19. *alpherakyi*, sp. n.
- ω*'. Wing-coverts creamy or sandy grey; crown and nape somewhat darker, a little more rusty brown; mantle slightly brighter, more golden yellowish; rump somewhat more olive . . . . . [(p. 403).  
20. *ussuriensis*, sp. n.
- ν*'. Black patch under the ear with no white spot.
- α*'. General colour exceedingly pale; mantle and flanks straw-yellow; scapular margins rufous buff; crown more yellowish olive; superciliaries snow-white and very broad; front and sides of the neck more greenish; wing-coverts bluish grey; rump more mottled . . . . . 21. *hagenbecki* (p. 405).



- β'. General colour very dark; mantle and flanks intense golden orange; scapular margins dark maroon or chocolate-rufous; crown more rusty brown; superciliaries narrower and partly chestnut-stained; front and sides of neck more purplish blue; wing-coverts sandy or creamy grey; rump not much mottled . . . . . 22. *karpowi* (p. 405).

[N.B.—In describing the colours, I hold the birds between myself and the light, the head being towards the light.]

1. PHASIANUS COLCHICUS Linn. (*Rion Pheasant*.)

*Ph. colchicus*: 1758, Linn. Syst. Nat. p. 158 ("rufus, capite cærulco. Habitat in Africa, Asia"); 1893, Ogilvie-Grant, Cat. Gall. p. 320 (pt., *cum subsp. septentr.*); 1897, Wilkowsky, Ornith. Faun. of Adsharia, Gooria, and N.E. Lasistan (Russ.), p. 65; 1903, Dresser, Manual, p. 658 (pt., *cum subsp. septentr.*).

The typical *Ph. colchicus* inhabits the western part of Transcaucasia: the basins of the Rion and Chorokh and the south-eastern and eastern coasts of Black Sea, not further north than Sukhum-kale. It is completely separated from all the allied forms by mountain-chains.

2. PHASIANUS COLCHICUS SEPTENTRIONALIS LORENZ. (*Caucasian Pheasant*.)

*Ph. colchicus*: 1811, Pallas, Zoogr. ii. p. 83; 1887, Th. Lorenz, Beitr. Ornith. Nordseite Kaukas. p. 56; 1893, Ogilvie-Grant, Cat. Gall. p. 320 (pt., *cum colchica ave*); 1903, Dresser, Manual, p. 658 (pt., *cum colch.*).

*Ph. colchicus* L., subsp. *septentrionalis*: 1888, Th. Lorenz, J. f. O. p. 571 (Kuban, Terek).

This well-marked form inhabits the basins of the Kuban, Terek, and Kuma up to some 2000–2500 feet, and the western coast of the Caspian from the mouths of the Volga nearly to the Apsheron Peninsula. In the central parts of its range, from Stavropol to Georgievsk, it was exterminated in the last half of the nineteenth century.

3. PHASIANUS COLCHICUS LORENZI, subsp. nov. (*Kura Pheasant*.)

*Ph. colchicus*: 1885, Radde, Orn. Cauc. p. 289 (pt.); 1888, Th. Lorenz, J. f. O. pp. 571-2 (Tiflis, "typisch").

*Ph. talischensis*; 1893, Ogilvie-Grant, Cat. Gall. p. 324 (Alazan R.) (pt., cum *Ph. talischensi*); 1903, Dresser, Manual, p. 660 (pt.).

*Phasiano talischensi similis, cum eo a vera colchica ave septentrionalique varietate plumis juguli subacutis caeruleoque angustius marginatis, abdomine non nigro sed latericio-fuseo, pectore medio non viridescente sed cupreo-rubro valde differt; a talischensi coloribus pallidioribus alarum caudæque et plumis juguli latius marginatis distinguendus.*

*Habitat* ad Curam fluvium Alazanumque in Transeaucasia.

The Kura Pheasant inhabits the central and eastern parts of Transeaucasia; the basins of the Kura and lower Araxes, with their tributaries up to some 2500-2800 feet above the sea-level, but not the Caspian coast north of the Kizil-Agatch Gulf. From its western and northern allies it is separated by high mountains, and is perhaps quite specifically distinct; but to the south-eastern *Ph. talischensis* it bears a much closer resemblance, and is certainly only a subspecies of it. It meets with the Talysh bird somewhere on the western coast of Kizil-Agatch.

I propose to name this bird after Mr. Th. C. Lorenz of Moscow, who in 1888 very ably pointed out its differences from *Ph. septentrionalis* and *Ph. talischensis*, but unfortunately could not at the time compare it with the Rion bird. Otherwise with his usual acuteness and his well-trained eye he would most certainly have separated them.

4. PHASIANUS COLCHICUS TALISCHENSIS LORENZ. (*Talysh Pheasant*.)

*Ph. colchicus*: 1876, Blanford, East. Pers. ii. p. 272 (Resht, Mazanderan); 1885, Radde, Orn. Cauc. p. 289 (pt.).

*Ph. persicus* Swz., subsp. *talischensis*: 1888, Th. Lorenz, J. f. O. p. 572 (Talisch).

*Ph. talischensis*: 1893, Ogilvie-Grant, Catal. p. 324 (pt.,

*cum Ph. lorenzi*); 1903, Dresser, Manual, p. 660 (subsp. of *colchicus*).

*Ph. persicus talyschensis*: 1896, Zarudny, Orn. Faun. Transcasp. p. 475 (Resht, ? Sari) (Russ.).

This Pheasant inhabits the lowlands of the south-western Caspian coast: Lenkoran (formerly in the khanat of Talysh), and the Persian province of Ghilan. How far east it ranges along the southern Caspian coast I do not know. Mr. N. A. Zarudny states that two specimens from Sari (Eastern Mazanderan) are identical with the Talysh bird, but further investigation may prove Mazanderan birds to be more or less distinct. Here, in Mazanderan, the ranges of *Ph. talyschensis* and *Ph. persicus* meet. Somewhere near the north-western shore of Kizil-Agatch it meets with an only subspecifically distinct form, *Ph. lorenzi*.

*Ph. talyschensis* is, of course, nearer to *Ph. persicus* than any other Pheasant of the Caucasian group, but it is sharply distinguished by the colour of the wing-coverts (a very constant feature among the western red-rumped Pheasants), so that the two must stand as specifically distinct.

##### 5. PHASIANUS PERSICUS Sewertzow. (*Persian Pheasant*.)

*Ph. colchicus*, var.: 1870, Poelzam, Proceed. Kasan. Soc. Natur. (Russ.), i. p. 140 (nec Linn., 1758).

*Ph. persicus*: 1875, Sewertzow, Bull. Soc. Nat. Mosc. xviii. 3 (1874, but publ. in 1875), p. 208 (southern shore of Caspian); 1893, Ogilvie-Grant, Cat. p. 324; 1896, Zarudny, Orn. Faun. Transcasp. (Russ.), p. 476; 1903, Dresser, Man. p. 661.

*Ph. shawi*: Elliot, Ibis, 1876, p. 132 (nec Elliot, 1870).

*Ph. komarowi*: 1885, Zarudny, Oiseaux de la Contrée Transcasp., in Bull. S. Nat. Mosc. lxi. 1, pp. 277, 322 (Tchirin Tchai, Kizyl-kan) (descr. null.).

The Persian Pheasant inhabits North-eastern Persia and the south-western part of the Transcaspien province, including the basins of the Atrek and Gurgan (rr. Tchirin-Tchaj, Kizyl-kan, Sumbar, Chandyr, middle Atrek, Kara-su, Gurgan) and the south-eastern Caspian coast from the left

shore of the lower Atrek to the Ashur-ada Isl. and Potemkin Peninsula.

Whether it goes further west in Mazanderan, I do not know. Its southern limit is, in all probability, the Elburz Mountains. In the north it is limited by the lower Atrek R. and the Kopet-Dah Mts.; and in the east by Mts. Darab-gaz, Kalat-i-Nadir, and others, which form the water-parting between the basins of the Atrek and the Heri-rud. Thus in geographical position, as in external appearance, *Ph. persicus* stands between the dark-winged and brownish-bellied Caucasian Pheasants and the white-winged and maroon-rufous-bellied birds of the *Ph. principalis* group.

6. PHASIANUS PRINCIPALIS Selater. (*Murghab Pheasant*.)

*Ph. principalis*: 1885, Selater, P. Z. S. p. 322 (Bala-Murghab); 1889, Zarudny, Bull. Soc. Nat. Mosc. p. 813 (pt., cum *Ph. komarowi*); 1890, Zarudny, Rech. Zool., in B. S. N. Mosc. p. 309 (pt.); 1893, Ogilvie-Grant, Cat. p. 325 (pt., cum *Ph. komarowi*); 1896, Zarudny, Orn. F. Transcasp. (Russ.), p. 477 (pt., cum *Ph. kom.*); 1903, Dresser, Man. p. 660 (pt.).

The typical *Ph. principalis* inhabits the Afghan and Russian parts of the Murghab basin and the oases of Merv, Yelotan, and Pandj-deh, ranging N.E. to Repetek, but does not occur in the valley of the Kushk.

The N.E. deserts separate this bird from its well-differentiated race *Ph. zarudnyi*, and from the black-bellied Turan Pheasants. From its nearest ally, *Ph. komarowi*, it is separated by the desert to the west and by the Paropamisus to the south-west. Whether it ranges further east, in the Sangalak valley, I do not know.

7. PHASIANUS PRINCIPALIS KOMAROWI Bogdanow. (*Tejend Pheasant*.)

*Ph. komarowi*: 1886, Bogdanow, Bull. Ac. Sc. St. P. xxx. p. 356 (Askhabad).

*Ph. principalis*: 1889, Zarudny, Bull. S. N. Mosc. p. 813 (pt., cum *Ph. princ. vero*); 1890, Zarudny, Rech. Zool., in Bull. S. N. M. p. 309 (pt.); 1893, Ogilvie-Grant, Cat. p. 325 (pt.); 1896, Zarudny, Orn. F. Transcasp. (Russ.),

p. 477 (pt.); 1903, Dresser, Manual, p. 660 (pt.); 1903, Zarudny, Birds of Eastern Persia (Russ.), in Mém. Géogr. gén. I. Russ. G. Soc. xxxvi. 2, p. 76 (Heri-rud).

*Ph. komarowi* inhabits the Tejend (Heri-rud) basin and the rivulets that flow from the slopes of the Darah-Gaz and Kalat-i-Nadir to the plains of Tejend: Dushak, Kaahka, and Iutfabad. In 1898 Mr. Zarudny found it numerous enough on the Heri-rud, between Pash-Robat and Kafir-Kala, but it has not yet been traced further to the south-east. In Ahal-Teke it is now exterminated, and ranges west only to Baba-Durmas, some 75 kilom. east from Askhabad by rail. Its range is bordered by the Kara-Kum sands to the north, by the water-parting of the Caspian and Inland basins to the west, south-west, and south; by the Paropamisus to the north-east, and by a narrow belt of waterless plains to the east, where the nearly allied, but on the whole distinguishable, *Ph. principalis typicus* has its home.

The Tejend Pheasant was discovered in 1883 by the indefatigable traveller Zarudny, to whom the political storms then prevailing in the Turcoman country were no drawback to scientific work; but the notes which he sent with the skin to the late Prof. Bogdanow were not published till 1886. Meanwhile Mr. Selater had described in 1885 the nearly allied Murghab bird, *Ph. principalis*, which was incorrectly identified with Mr. Zarudny's Askhabad Pheasant. They are very much alike, it is true, but the western (Askhabad-Tejend) form is quite recognisable (as Mr. Zarudny himself afterwards allowed) by the greenish gloss of the black flank-spots, which is not seen in Murghab birds (I have studied some dozen of these last), if they are examined, as is my usual custom, with the head to the light and between the observer and the light. This feature was noted in Prof. Bogdanow's diagnosis ("plumis singulis in corporis lateribus aurantiacis, fascia lata terminali viridi-nigra ornatis"). This difference between greenish- and purple-blue gloss is certainly not striking, but still I consider that recognisably different birds should bear different names, and I think that Bogdanow's name "*komarowi*" should be used for the Tejend bird, though Mr. Zarudny himself in 1885 (*cf. supra*) wrongly identified Sewertzow's

*Ph. persicus* from Tchirin-Tchai and Kizyl-Kan with his own Askhabad bird, and called it "*Ph. komarowi*," without, however, giving a description of it.

For those who consider that this error invalidates the name "*komarowi*," I propose to name the Tejend Pheasant *Phasianus principalis bogdanowi*.

S. PHASIANUS PRINCIPALIS ZARUDNYI, NOM. NOV. (*Zarudny's Pheasant*.)

*Ph. principalis*: 1891, Zarudny, Note on a new Variety of Pheasant (*Ph. principalis* Sclat. var. *klossowskii* Tarn.) (Russ.), p. 2 (Daragan-Ata).

*Ph. medius*: 1896, Zarudny, Ornith. Faun. Transcasp. (Russ.), p. 481 (from Khiva to Chardjui) (nec *Ph. medius* Milne-Edwards, 1870, Ois. foss. Fr. ii. p. 242).

The range of Zarudny's Pheasant is confined to the valley of the middle Amu Daria (Oxus), from Petro-Alexandrovsk, in the southern part of Khiva, to Chardjui, and perhaps somewhat higher up the river.

In the north-west its range overlaps that of *Ph. chrysomelas*, as is also probably the case with *Ph. bianchii* in the south-east, somewhere between Chardjui and Karki, but it needs no close comparison with these black-bellied green-breasted birds. To its north-eastern neighbour, *Ph. zerafshanicus*, Zarudny's Pheasant is nearer than any other rufous-bellied Pheasant (nearer in appearance, as well as in range), but it is much nearer still to *Ph. komarowi*, and, as it seems, only subspecifically distinct from it, the points of difference being fully shown in the synoptical table.

Mr. Zarudny collected some sixteen specimens of this bird, and fully described it (under the name *Ph. medius*, unfortunately preoccupied), comparing point after point with *Ph. chrysomelas*, *Ph. principalis*, and *Ph. klossowskii* (= *zerafshanicus*). To this description Mr. M. A. Menzbier added a footnote, stating that Zarudny's Pheasant is quite identical with *Ph. principalis* or—if distinguishable—needs no particular name, being only a cross between *Ph. principalis* and *Ph. chrysomelas*. It seems rather rash to deny the claims of a bird to distinctness on the ground that it may be, or may

not be, undistinguishable from some other form. But, in fact, *Ph. zarudnyi* is a very well-differentiated form. As to cross-breeding, it is quite likely that *Ph. chrysomelas* may sometimes, on the borders of Khiva, interbreed with *Ph. zarudnyi*, as it does, in fact, with *Ph. mongolicus turcestanicus* on the eastern shores of the Aral Sea. Nevertheless M. Menzbier does not deny that *Ph. chrysomelas* and *Ph. mongolicus* may need separate names. And hybridisation on any large scale is not proved and is highly improbable.

Parent birds *must* meet somewhere to produce a hybrid, and the ranges of the parent species must be very close together in order to allow them to meet often in the case of such sedentary birds as Pheasants. Certainly *Ph. zarudnyi* is somewhat intermediate between *Ph. principalis komarowi* and *Ph. zerafshanicus* (not *Ph. chrysomelas*), but an evolutionist should find a more plausible explanation of the fact, instead of inventing the somewhat ridiculous hypothesis that a fairly vast area is inhabited exclusively by hybrids. From Chardjui to Petro-Alexandrovska, a distance of some 370 kilom. in a straight line, neither *Ph. principalis typicus*, nor *Ph. princ. komarowi*, nor *Ph. zerafshanicus* are met with, and very few (if, indeed, any) *Ph. chrysomelas*. So we may take it for granted that *Ph. zarudnyi*—whatever pedigree it might have had in epochs long ago—propagates now *inter se* and breeds true.

9. PHASIANUS ZERAFSHANICUS Tarnovski. (*Zerafshan Pheasant*.)

*Ph. zerafshanicus*: 1891, Tarnovski, Field, lxxvii. p. 409; 1893, Ogilvie-Grant, Catal. p. 326.

*Ph. klossowskii*: 1891, Tarnovski, l. c.; 1896, Zarudny, Orn. Faun. Transcasp. (russ.), p. 483.

*Ph. principalis*, var. *klossowskii*: 1891, Zarudny, Note on a new Subspecies of Pheasant (Russ.), p. 1.

*Ph. tarnovskii*: 1892, Seebohm, P. Z. S. p. 271.

*Ph. zerafshanicus*: 1903, Dresser, Man. p. 661 (subsp. of *Ph. persicus*).

The Zerafshan Pheasant has been rather unfortunate in its

synonymy. Its range is confined to the valley of Zerafshan in Buchara, so that it is the most eastern representative of the little group of rufous-bellied Pheasants, and is by no means a near relative of *Ph. mongolicus*, though it has a white collar just visible, or of *Ph. persicus*, though it somewhat resembles this last in its breast-colour.

In the north the water-parting of the Zerafshan and the Syr-Daria serves as a limit between this bird and *Ph. turcestanicus*, with its black belly, greyish wings, and broad collar (not to mention other points of dissimilarity), and in the south the Gissar Mts. separate it from *Ph. bianchii* with its black belly and blackish-green throat. To the west its range nearly meets that of *Ph. zarudnyi*, as in times of high floods the Zerafshan reaches the Amur-Daria. But, so far as I know, these two birds are specifically distinct, as *Ph. zerafshanicus* seems always to be recognisable at a glance from the members of the group of *Ph. principalis* by its collar and the colouring of the breast. In the Museum of my friend Baron Harald Loudon I have examined specimens from the most western part of its range, and they do not differ from my own specimens from Siadin, and from others that I have seen from still more eastern parts of the Zerafshan valley.

10. PHASIANUS CHRYSOMELAS Sewertzow. (*The Khivan Pheasant*.)

*Phasianus, nova sp.*: 1875, Bogdanow, Transact. Soc. Natur. St. Petersb. (Russ.), vi. p. lxxxvi (Khiva).

*Ph. chrysomelas*: 1875, Sewertzow, Bull. S. N. Mose. xlvi. 3 (dated 1874, but not issued till 1875), p. 207 (Amu-Daria); id. J. f. O. p. 225 (sine descr.); 1893, Ogilvie-Grant, Cat. p. 327; 1896, Zarudny, Orn. Faun. Transcasp. (Russ.), p. 479; 1903, Dresser, Man. p. 662.

*Ph. dorranti*: 1875, Sewertzow, J. f. O. p. 225.

*Ph. oxianus*: 1875, Sew. l. c.

*Ph. insignis*: 1876, Elliot, Ibis, p. 132 (nec Elliot, 1870).

The Khivan Pheasant inhabits the delta of Amu-Daria and the lower parts of its valley, and the oasis of Khiva.



On the west and south its range is bordered by the Ust-Urt and the waterless sands of the Kara-Kum. On the south-east, from the borders of Khiva up to Chardjui, it is very scarce indeed, if not wholly wanting, being replaced by the rufous-bellied purple-breasted *Ph. zarudnyi*. To the north-east it meets somewhere on the shores of the Aral Sea with *Ph. turcestanicus*, a broadly collared form of *Ph. mongolicus*. Mr. Ogilvie-Grant (*l. c.*), citing Th. Pleske (*Mém. Ac. Sc. St. P.* xxxvi. no. 3, p. 48), adds "Kasalinsk" as locality, but Mr. Pleske expressly states that his birds, although purchased in Kasalinsk on the Syr-Daria, had been brought from the Oxus.

11. PHASIANUS CHRYSOMELAS BIANCHII, subsp. nov. (*Bianchi's Pheasant.*)

"?" *Ph. chrysomelas*: 1886, Bianchi, Zur Ornithologie der westlichen Ausläufer des Pamir und des Alai, in *Mél. biol.* t. xii. l. 5, p. 677 (Kafir-nagan, Wachsch); ? 1896, Zarudny, Ornith. Faun. Transcasp. (Russ.), p. 480 (? pt., Karki).

*Phasiano chrysomelani* similimus, sed pectore juguloque valde obscurioribus, plumarum margine virescenti-nigro latiore, area præapicali autem fulvo-aurea minore; colli plumis albo minus variegatis.

This Pheasant inhabits the upper parts of the Oxus basin. Messrs. Grum-Grzimailo, during their travels in the mountains of Buchara in 1885, met with it in the valleys of Kafir-nagan (Dschidda-bach) and Wachsch (Kurgan-Tjube). Dr. V. L. Bianchi has pointed out its differences from the Khivan bird, but has not separated it, on the ground that *Ph. chrysomelas* varies much even in its typical locality. But Mr. Zarudny's explorations now make it evident that the range of *Ph. chrysomelas*, as a whole, is not contiguous, but is broadly interrupted in the middle of the Amu-Daria valley, where only *Ph. zarudnyi* is met with. This geographical isolation makes it advisable to distinguish sub-specifically the form of the upper Oxus.

Specimens (killed in May) brought home by Messrs. Grum-Grzimailo are in somewhat worn plumage, and in

fresh examples the chief differences from the typical form (as well as from *Ph. shawi*) would be more conspicuous.

On the north, east, and south the home of *Ph. bianchii* is limited by high mountains—the Gissar, Alai, Pamir, and Hindu-kush. On the west its limit is not yet quite ascertained. I suppose, however, that the females and chicks met with by N. A. Zarudny and A. L. Iashtchenko in the Oxus valley, from Biy-kala up to Kelif, and the male received by Mr. Zarudny from Karki, would belong to this subspecies. So somewhere between Karki and Chardjui the range of *Ph. bianchii* meets or somewhat overlaps that of *Ph. zarudnyi*.

## 12. PHASIANUS SHAWI Elliot. (*Yarkand Pheasant*.)

*Ph. shawi*: 1870, Elliot, P. Z. S. p. 403 (Yarkand); 1875, Scully, Str. Feath. iii. p. 433; 1891, Sharpe, Sec. Yark. Miss. p. 120; 1893, Ogilvie-Grant, Cat. p. 326; 1903, Dresser, Man. p. 660.

*Ph. insignis*: 1870, Elliot, P. Z. S. p. 404 (Yarkand); 1875, Scully, Str. Feath. iii. p. 433.

*Ph. chrysomelas*: 1877, Elliot, Str. Feath. v. p. 198 (nec Sewertzow, 1875).

*Ph. shawi* inhabits the western part of Chinese Turkestan, the valleys of the Khotan-Daria, Yarkand-Daria, and Kashgar-Daria, the upper parts of the Tarim, and the lower parts of the Aksu valley. It does not range high up the mountainous parts of the valleys, and the caravan-road from Sanju to Kashgar forms its south-western limit.

The snow-clad chain of Tian-Shan serves as a limit between this most easterly white-winged Pheasant and its northern and north-western neighbours—the copper-throated, white-collared, and silvery-grey-winged *Ph. mongolicus* and *Ph. turcestanicus*. The enormous masses of the Pamirs and Alai separate it from *Ph. bianchii* of the upper Oxus, which is better differentiated from *Ph. shawi* than the typical *Ph. chrysomelas* with its more narrowly-margined chest-feathers.

To the east our bird has no well-defined limits and somewhere in the valley of middle Tarim must meet with the

sandy-winged *Ph. tarimensis*. It is not improbable that *Ph. shawi* is subspecifically differentiated in some parts of its vast range, and possibly *Ph. insignis* is slightly distinct, but further material is required to decide these points.

13. PHASIANUS MONGOLICUS Brandt. (*Kirghiz Pheasant*.)

*Ph. torquatus*: 1841, Karelin, Bull. S. N. Mosc. p. 561 (Tarbagatai) (nec Gmel., 1788).

*Ph. mongolicus*: 1844, Brandt, Bull. Ac. Sc. St. P. iii. p. 51 (Altai); 1891, Alphéraky, Kuldja and Tian-Shan (Russ.), pp. 5, 17, 19, 22, 29, 48, 89, 98, 153; 1899, Kozlow, Results of the I. R. G. S. Expedition in C. Asia, 1893-95 (Russ.), ii. p. 5; 1903, Dresser, Man. p. 665 (pt., *cum turcestanica ave*).

*Ph. brandti*: 1901, Rothschild, Bull. B. O. C. vol. xii. p. 20 (withdrawn in 1903 by the author).

*Ph. mongolicus* was named, as is often the case, somewhat on the *lucus a non lucendo* principle, as it does not inhabit Mongolia, but the Kirghiz country in the north-eastern parts of Russian Turkestan (province of Semiretshensk and part of Semipalatinsk) and the Chinese province of Kuldja, that is the basins of Lakes Issyk-kul, Balkash, Ala-kul, and Zaisan, with their tributaries. About  $48^{\circ}$  to  $48\frac{1}{2}^{\circ}$  N. is its northern limit; to the east it ranges in the Tian-Shan high up into the valleys of Tekes and Kunges, tributaries of the Ili.

On the south-east the Tian-Shan serves as the boundary between our bird and *Ph. shawi*, on the south-west the Alexander and Karatau Mountains form a similar boundary between it and *Ph. turcestanicus*. On the east, parts of the Tian-Shan, Alatau, and Tarbagatai ranges separate it from the closely allied *Ph. semitorquatus*, and on the north-east the Ektagh Altai divides it from *Ph. hagenbecki*, which belongs to the eastern grey-rumped group of Pheasants. Whether it is limited on the west by the Muin-Kum sands and the steppe of Hunger, I cannot say. In the southern part of the Turgai Province Pheasants are found (*M. N. Aristow, in litt.*), but not having yet received skins, I cannot decide whether they belong to this or to the following form.

14. PHASIANUS MONGOLICUS TURCESTANICUS LORENZ.  
(*Turkestan Pheasant.*)

*Ph. colchicus*: 1823, Lichtenstein, Naturh. Anh. to Eversmann's Reis. Buchar. p. 133 (Kuwan-Darja, Ian-Darja) (nec Linn., 1758); 1866, Eversmann, Natural History of the Orenburg country (Russ.), iii. p. 350 (var. *torque colli alba*, Aral).

*Ph. mongolicus*: 1873, Sewertzow, Vertic. and Horizont. Distribution of Turkestan. Animals (Russ.), in Trausac. I. S. F. N. A. E. v. viii. pt. 2, p. 68 (nec Brandt, 1844); 1893, Ogilvie-Grant, Cat. p. 328 (nec Brandt); 1897, Stolzmann, Bull. S. N. Mosc. n. 1, p. 78 (nec Br.); 1903, Dresser, Manual, p. 665 (pt., *cum typ.*).

*Ph. mongolicus turcestanicus*; 1896, Lorenz, Orn. Mon. p. 189 (Syr-Daria).

This Pheasant ranges through Russian Turkestan, from the north-eastern shores of the Aral Sea along the valley of Syr-Daria as far east as Gulcha, a valley in the Alai some 5000 feet in altitude and about 140 kilom. south of Osh.

Its range is bordered by parts of the Tian-Shan and Alai Mts. in the south-east, and by the Alai and Gissar Mts. in the south, these chains separating it from *Ph. shawi*, *Ph. bianchii*, and *Ph. zerafshanicus*. To the west the Kysyl-Kum Sands separate it from *Ph. chrysomelas*, but on the shores of the Aral Sea their ranges meet. To the north-east the Karatau, Alexander, and Terskentaу Mts. form its boundary from the closely allied, but perfectly distinguishable, *Ph. mongolicus*.

15. PHASIANUS MONGOLICUS SEMITORQUATUS SEWERTZOW.  
(*Dzungarian Pheasant.*)

*Ph. semitorquatus*: 1875, Sewertzow, Ibis, p. 491 (N.E. of Kuldja); 1893, Ogilvie-Grant, Cat. p. 329; 1896, Lorenz, Orn. M. p. 190 (Manas, Chihó); 1903, Dresser, Man. p. 665 (subsp. of *Ph. mong.*).

*Ph. mongolicus semitorquatus*: 1892, Pleske, Bull. Ac. St. P. xiii. p. 295; 1899, Kozlow, Res. I. R. G. S. Exp. Centr. As. (Russ.), ii. p. 286.

This Pheasant, which is much more nearly allied to the

typical *Ph. mongolicus* than *Ph. turcestanicus*, inhabits the southern part of Dzungaria, westwards as far as the basin of Lake Ebinor, and eastwards to Guchen.

The Tian-Shan forms its southern boundary, on the other side of which *Ph. tarimensis* is found, and to the south-west, west, north-west, and north it is divided by the Boro-Khoro and Alatau Mts. from the typical *Ph. mongolicus*.

16. PHASIANUS TARIMENSIS Pleske. (*Tarim Pheasant*.)

*Ph. shawi*: 1877, Przewalski, Proc. Imp. Russ. Geogr. S. (Russ.) xiii. p. 275 (Lob-nor) (nec Elliot, 1870).

*Ph. tarimensis*: 1883, Przewalski, From Zaissan through Khami to Tibet (Russ.), p. 95 (descr. nulla); 1888, Pleske, P. Z. S. p. 415; 1893, Ogilvie-Grant, Cat. p. 327; 1899, Kozlow, Res. Imp. Russ. Geogr. S. Exped. C. As. (Russ.) ii. pp. 74, 286 (Konche-Daria); 1903, Dresser, Man. p. 662 (subsp. of *Ph. persicus*).

This Pheasant is confined to the eastern parts of Chinese Turkestan—namely, the lower Tarim and Cherchen-Daria and the lakes Bagrach-kul and Lob-nor. It was discovered by Przewalski, but, so far as I know, its first description was published by Pleske.

From *Ph. vlangalii* in the south-east it is divided by the enormous wall of the Altyn-Tag, and from *Ph. semitorquatus* on the north and *Ph. mongolicus* on the north-west by the equally high Tian-Shan ranges. To the east the Kum-Tag sands form its boundary from the grey-rumped *Ph. satscheuensis*, and on the west, somewhere on the middle Tarim, its range coalesces with that of the rufous-rumped *Ph. shawi*.

In its appearance *Ph. tarimensis*, with its greenish-buffy tinge on the rump, seems somewhat intermediate between the western coppery-red and the eastern olive-grey rumped birds; but it is evidently much more closely allied to the first-named group, especially to *Ph. shawi*, and is quite readily distinguished from all its neighbours by its yellowish-brown wing-coverts. *Ph. shawi* has the coverts somewhat yellowish white, *Ph. mongolicus* has them silvery greyish white, *Ph. vlangalii* ashy grey somewhat tinged with greenish, and *Ph. satscheuensis* lavender-grey.

17. PHASIANUS SATSCHEUENSIS Pleske. (*Sachjow Pheasant*.)

*Ph. satscheuensis* : 1883, Przewalski, From Zaissan through Khami to Tibet (Russ.), p. 95 (descr. nulla) ; 1892, Pleske, Bull. Ac. St. P. xiii. p. 296 ; 1899, Kozlow, Res. I. Rus. Geo. S. Exp. C. As. (Russ.) ii. pp. 107, 113, 286.

*Ph. shawi* : 1888, Seebohm, P. Z. S. p. 415 (pt.).

*Ph. satscheuensis* : 1893, Ogilvie-Grant, Cat. p. 333.

*Ph. satchuensis* : 1903, Dresser, Man. p. 667 (subsp. of *Ph. torquatus*).

The range of this Pheasant is restricted to the Sachjow oasis and its environs on the northern slopes of the Nan-Shan, and to the valleys of Dan-khe and Su-lei-khe (Bulunzir) up to 7000 feet, along with Lake Hala-chi. It was discovered and named by Przewalski, but was described by Pleske\*. Numerous and very interesting biological notes are added by Mr. P. K. Kozlow.

The Sachjow Pheasant is, at a glance, distinguishable not only from its western neighbour *Ph. tarimensis*, but also from *Ph. vlangalii* and *Ph. strauchi*, which occur on the other side of the Nan-Shan, by its general pale colour and white collar, and from *Ph. holdereri*, which occurs a long way off to the east, by the brownish-margined scapulars, grey-covered wings, and other particulars.

18. PHASIANUS FORMOSANUS Elliot. (*Formosan Pheasant*.)

*Ph. torquatus* : 1863, Swinhoe, Ibis, p. 401 (pt.).

*Ph. formosanus* : 1870, Elliot, P. Z. S. p. 406 ; 1877, David et Oustalet, Ois. Chin. p. 710 ; 1893, Ogilvie-Grant, Cat. p. 333.

This Pheasant inhabits Formosa, and has many features to distinguish it from the continental Ring-Pheasants. Even its iris is stated to be white, not yellow.

A statement has been made that similarly pale-flanked specimens are sometimes met with in China and Corea, but this is somewhat doubtful. All the Corean birds that I have

\* I have not consulted the German edition of Przewalski's 'Travels to Tibet,' as there are no copies of it in libraries of the Academy of Science or the Geographical Society, but, so far as I know, it is a verbatim translation from the Russian.

seen or heard of (*Mr. Ernst Hartert, in litt.*) are darker than the darkest Chinese Ring-Pheasants (I have recently named them *Ph. karpowi*, see below, p. 405). Certainly in the most northern parts of Corea *Ph. ussuriensis* may occur, and pale "Chinese" specimens may turn out to be *Ph. alpherakyi* from Northern Manchouria; but these two Pheasants have nothing to do with *Ph. formosanus* or the other true Chinese Ring-Pheasants, being quite different specifically. Ornithologists have managed to make such a "ragoût fin" of the eastern White-collared Pheasants that it is not easily digested.

19. PHASIANUS ALPHERAKYI, sp. nov. (*Sungarian Pheasant.*)

*Ph. colchicus*: 1811, Pallas, Zoogr. ii. p. 83 (nec L., 1758) ("*varietas torque alba in Mongolorum desertis*").

*Ph. torquatus*: 1860, Schrenck, Vög. Amurl. p. 402 (pt., Amoor, but not Macao in S.E. China); 1863, Radde, Festl. Orn. S. O.-Sib. p. 303 (pt.); 1877, David et Oustalet, Ois. Chin. p. 409 (pt.: var. "A"); 1893, Taczanowski, Faun. Orn. Siber. Or., in Mém. Ac. St. P. sér. 7, xxxix. p. 785 (pt.); Ogilvie-Grant, Cat. p. 331 (pt.).

*Ph. torquatus mongolicus*: 1901, Rothschild, Bull. B. O. C. xii. p. 21 (nec Brandt, 1844), subsequently withdrawn by the author (pt., cum *Ph. karpowi*).

*Ph. torquatus pallasi*: 1903, Rothschild, Bull. B. O. C. xiii. p. 43 (pt., cum *Ph. karpowi*).

*Ph. hayenbecki*: 1903, Tegetmeier, Field, vol. ci. p. 775; id. vol. cii. p. 232; 1904, Tegetmeier, Pheasants, p. 190 (figura bona) (nec Rothschild, 1901).

Pallidus, torque integra alba latissima, superciliis latis et longis maculaque postoculari albis; pileo uropygioque cyaneo-olivascensibus obsolete virenti nitore, scapularibus margine castaeano-rubiginoso, juguli plumis angustissime cæruleo-nigro marginatis, tectricibus alarum ex majore parte cærulescenti-canis.

*Habitat* in Manchuria centrali, circa Sungari fluvium.

*Ph. alpherakyi* inhabits the central and northern parts of Manchouria and probably N.E. Mongolia. It is abundant on the middle Sungari, and great quantities of these birds have been brought during the last two years to the markets of

Moscow, St. Petersburg, and London from Kharbin (*Th. C. Lorenz, in litt.*). It extends eastwards to lake Khanka, whence I have a specimen in my collection, but not to the Ussuri and the coast of the Japanese Sea, being there replaced by the closely allied *Ph. ussuriensis*. It extends north to the mouth of the Sungari and the neighbouring parts of the Amoor Valley up to Ekaterino-Nikolsk in 48° N. lat. Thus the Amoor and the Little Khinghan Mts. form its northern limit. In the south, somewhere near Ghirin, its range coalesces with that of the strikingly different *Ph. karpowi* of Southern Manchouria and Corea. Further to the west it occurs near Tsitsikar, but in these days it is not found on the Dalai-Nor and Argun River (as was the case in the time of Pallas), and I suppose that the Great Khinghan Mts. limit its range here. Pallas mentions the River Shara-Muren (tributary of Lao-khe?) as its locality, but most probably he was misinformed, as the Shara-Muren bird is *Ph. kiungsuensis*.

It is most annoying to be obliged to add more names to the already overburdened list of ornithological synonyms and to rename the bird described a century ago with the clearness and exactness usual to the unrivalled genius of Pallas, but I see no other way out of it. Pallas, unfortunately, gave no name to this bird, and Mr. Rothschild's attempt to use part of Pallas's narrative as a name for it was quickly abandoned by the author himself.

To use Gmelin's unhappy name "*Ph. torquatus*" is quite out of the question: his diagnosis [Syst. Nat. xiii. ed. 1788, i. pt. ii. p. 744: "*torquatus*,  $\beta$ . *Ph. torque albo*"] mentions only the white collar, but in China and the adjoining countries (Mongolia, Ussuri-land, &c., that formed part of the Chinese Empire in Gmelin's time) there are found at least nine different forms of Ring-Pheasants, six of them (*Ph. hagenbecki*, *Ph. alpherakyi*, *Ph. karpowi*, *Ph. formosanus*, *Ph. satscheuensis*, and *Ph. holdereri*) quite distinct specifically; and I do not include here *Ph. mongolicus*, which in fact inhabits a part of the Chinese Empire (Kuldja and Dzungaria). Gmelin gives no locality for his "*Ph. torquatus*," and Latham, cited



by Gmelin, names various provinces of China and Mongolia. Evidently it is quite impossible to decide what sort of bird Gmelin's *Ph. torquatus* was. Mr. Rothschild and many others think that his type was a South-Chinese bird. Seebohm and Bianchi are inclined to take the N.E. Mongolian bird as typical, but all this remains and must remain only guesswork, and "*Ph. torquatus*" of Gmelin can only be cited as a "synonym in partibus" under *Ph. alpherakyi*, *Ph. kiangsuensis*, and *Ph. gmelini*.

Recent authors have mentioned under Gmelin's name several quite distinct species, as North Manchourian *Ph. alpherakyi* cannot be considered as conspecific with the Eastern and Southern Chinese Ring-Pheasants. Not only is it quite different in general colour, being very pale even in comparison with moderately bright examples of *Ph. gmelini* from Foo-chow, but several other sharply marked characters distinguish it—for instance, the uninterrupted broad collar, the white post-ocular patch, &c.; and there are no intermediate forms, as the other pale-coloured Ring-Pheasants, which inhabit far remote areas, do not share in these characters, but possess their own features which are quite as sharply defined.

Last, but not least, Mr. Rothschild's well-chosen name "*Ph. pallasii*" must unfortunately be declined, as being unmistakably based on two distinct species.

Mr. Rothschild gives as the range of his *Ph. torquatus mongolicus* (subsequently renamed by him *Ph. torquatus pallasii*) "N.E. Mongolia, Amur, and Corea," and his description confirms the fact that he had before him both Pheasants from Amoorland, my *Ph. alpherakyi* or its eastern form, so well described by Pallas, and Pheasants from Corea, described by me some months ago under the name *Ph. karpowi*. Mr. Rothschild's description is as follows:—

"Crown and occiput olive-brown instead of olive-green [as in Shanghai birds, my *Ph. kiangsuensis*], this point fits more or less both the Amoor and Corean birds; the superciliary stripes are very broad, uniting on the forehead, and of a brownish-buff colour mixed with buffy white, instead

of greenish-whitish buff [as in *Ph. kiangsuensis*; this point evidently is intended for Amoor birds, as the superciliaries of Corean birds are not so broad and long, widely interrupted in front, and tinged in upper parts not with brownish buff—very pale brownish buff indeed—but with dark rusty or maroon-red], with a nearly complete green collar below the white ring [purely individual character, as Mr. Rothschild afterwards satisfied himself (*Mr. E. Hartert, in litt.*)]. The flanks are darker buff [than in Shangai birds: this applies only to Corean birds, *Ph. karpowi* being in fact the darkest of all the Ring-Pheasants; but Amoor birds have the flanks of a much paler colour than the Kalgan, Shanghai, or even Foo-chow Ring-Pheasants], the breast-feathers having the violet borders much narrower or obsolete. The rump is brownish olive instead of greenish lavender-blue, the sides of the rump being of a dirty orange colour [this is true in Corean birds, the rump being of a very brownish olive, while the rump of the Amoor bird is of a much more greenish lavender-blue]. The broad borders of the scapulars are duller chocolate-red [quite true in Corean birds, but Amoor birds have somewhat paler scapulars than *Ph. kiangsuensis*].” Mr. Rothschild adds: “The Corean bird may prove to be a third subspecies, as some birds have very pale flanks.” As I have just stated, all the Amoor specimens (true *Ph. alpherakyi* and its eastern subspecies *Ph. ussuriensis*) have pale flanks, but Corean and South Manchoorian specimens have the darkest flanks of any Ring-Pheasant. I have one specimen from Te-lin, the type of my *Ph. karpowi*, in my own collection, two similar Corean birds are in the Zoological Museum of the Academy of St. Petersburg, and Mr. Rothschild himself and Mr. Hartert were so kind as to compare my specimen with Corean examples in the Tring Museum and have found them to be identical. I may say, that so accurate an observer as Taczanowski mentions that the Corean Pheasants have “toutes les couleurs plus foncées.”

I may add that there are no grounds for giving to the Corean Pheasant only subspecific rank. In the colour and

in the form of its supercilia it is somewhat intermediate between the Amoor and East-Chinese birds, and in the completeness of its collar it resembles the former; but in general colour it is by no means intermediate between them, as it is much darker than either, and by this feature alone is, at a glance, distinguishable from the Amoor bird. Further, *Ph. alpherakyi* (and its subspecies *Ph. ussuriensis*) have a small, but very good, distinguishing character—the white of the ear-patch. The ranges of *Ph. alpherakyi* and *Ph. karpowi* meet, and the possibility of accidental interbreeding cannot be denied: we know, for instance, that *Lyrurus tetrix* interbreeds with *Lagopus albus* and *Tetrastes bonasia*, all three species belonging to distinct genera; but this must be only accidental as no intermediate specimens are known. I have four specimens of the Amoor bird (of both varieties) in my collection, and have closely examined two specimens in the St. Petersburg Academy's Museum and some twenty-five or thirty specimens in the market (brought from Kharbin), but I have seen no intermediate birds.

That such an expert in Pheasant-rearing as Mr. Tegetmeier has several times mentioned and has figured London-market specimens (from Kharbin, *i. e.* true *Ph. alpherakyi*) under the name of a quite distinct species (*Ph. hagenbecki*) can be explained only by the fact that the description of *Ph. torquatus mongolicus* (= *pallasii*) was based on two quite distinct species, and fits the Corean better than the Amoor species.

So this Pheasant must have a new name to itself, and I propose to call it after Mr. S. N. Alphéraký, so well known as a naturalist, who first kindly called my attention to this group of birds, and sent to me for description the first specimen of this species.

20. PHASIANUS ALPHERAKYI USSURIENSIS, subsp. nov.  
(Ussurian Pheasant.)

*Ph. torquatus*: 1863, Radde, Fests. Orn. Sib. Or. p. 303 (Port May) (pt., *cum amurensi et chinensi avibus*); 1884,

Bogdanow, Catal. Avium Imp. Ross. i. p. 21 (Ussuri, deser. bona) (pt.) ; 1893, Taczanowski, Faun. Orn. Sib. Or., in Mém. Ac. St. Pet. sér. 7, xxxix. p. 785 (pt., Ussuri) ; 1893, Ogilvie-Grant, Cat. p. 331 (pt.) ; 1903, Dresser, Man. p. 665 (pt.).

*Ph. torquatus mongolicus* : 1901, Rothschild, Bull. B. O. C. xii. p. 21 (pt., cum *Ph. karpowi*) (nec Brandt, 1844).

*Ph. torquatus pallasi* : 1903, Rothschild, Bull. B. O. C. xiii. p. 43 (pt.).

*Phasiano alpherakyi* simillimus, pallidus et torquatus maculaque postoculari alba, sed pileo paulo obscuriore, olivascenti-terreo, dorso paululo obscuriore, tectricibus alarum arenacco-lacteis, non cærulescenticanis distinguendus.

*Habitat* circa Ussuri fluvium et litora maris Japonici.

*Ph. ussuriensis* replaces the typical *Ph. alpherakyi* in the basin of the Ussuri, whence it occasionally extends to the mouths of the river, and in the southern part of Ussuri-land, where, on the shores of the Japanese Sea, it is not found north of 44° N. lat. On the north-west the water-parting of the Ussuri and Sungari evidently borders its range, but further to the south its limit is as yet uncertain. Perhaps, however, it does not extend further west than the Sikhota-Alin Mts., as I have in my collection a specimen of the typical (western, grey-winged) form from lake Khanka, and another labelled "Vladivostok," but probably obtained at some distance to the westward. To the south somewhere near the Corean boundary its range coalesces with that of *Ph. karpowi*.

Pallas's "*Ph. colchicus torque alba*" is not this form, but the typical *Ph. alpherakyi*, as is evident from his description, and from the range he gives ("alæ secundariæ incumbentibus non luteo-griseis, sed e cærulescenti-canis," Zoogr. l. c.); but Mr. Rothschild's *Ph. torquatus mongolicus*—and his *Ph. torquatus pallasi*, so far as it is not based on *Ph. karpowi*—is founded on specimens not of the western Sungarian form, but on sandy-winged birds from Ussuri, Amoor Bay near Vladivostok, and Sidemi, somewhat south of Vladivostok. So I am most kindly informed by Mr. Ernst Hartert, who

assisted Mr. Rothschild in comparing my typical specimens of *Ph. alpherakyi* with the types of *Ph. pallasi* at Tring.

My own specimen of *Ph. ussuriensis* comes from Ussuri, and I have examined two examples from Sidemi in the Museum of the Academy of St. Petersburg. These three specimens, as well as those in Tring Museum, are evidently identical with birds that served for Mr. Taczanowski's descriptions of "*Ph. torquatus*" from Ussuri-land, and differ from some thirty or thirty-five specimens from Sungari that I have examined, as also from specimens on the London market (also from Sungari) examined by Mr. Hartert (*in litt.*).

21. PHASIANUS HAGENBECKI Rothschild. (*Kobdo Pheasant.*)

*Ph. hagenbecki*: 1901, Rothschild, Bull. Br. O. C. xii. p. 20 (Kobdo Valley); 1903, Dresser, Man. p. 666 (subsp. of *Ph. torquatus*).

*Ph. hagenbecki* is found in the valley of Kobdo in the southern Altai. It is the most western representative of the eastern grey-rumped Pheasants, and is only divided from *Ph. semitorquatus* in the south-west by the Ektagh Altai Mts. It is separated from *Ph. alpherakyi* by nearly the whole of Northern Mongolia. This last resembles our bird in its general pale colour (but not quite so pale as in *Ph. hagenbecki*) and in its broad collar, but differs from it in many important points (as shown in the synoptical table above, p. 384).

In the Museum of the Academy of St. Petersburg I have examined two specimens of this bird brought home from Kobdo by Mr. M. M. Berezowsky in 1877.

22. PHASIANUS KARPOWI Buturlin. (*Corean Pheasant.*)

*Ph. torquatus*: 1893, Taczanowski, Faun. Orn. Sib. Or., in Mém. Ac. St. Pet. sér. 7, t. xxxix. p. 788 (pt., Corée); 1893, Ogilvie-Grant, Cat. p. 331 (pt.); 1902, Bianchi, Matér. Orn. Mandchourie, in Ann. Mus. Zool. St. Pé't. t. vii. (Te-lin, Southern Manchouria) (nec Gm.).

*Ph. torquatus mongolicus*: 1901, Rothschild, Bull. B. O. C. xii. p. 21 (pt., *cum ussuriense ave*) (nec Brandt, 1844).

*Ph. torquatus pallasi*: 1903, Rothschild, Bull. B. O. C. xiii. p. 43 (pt., *cum ussuriense ave*).

*Ph. karpowi*: 1901, Buturlin, Orn. Monat. xii. p. 3 (Te-lin, Southern Manchouria).

*Ph. karpowi* extends through Corea, where, however, it is rare south of Seoul, and through Southern Manchouria, north to Ghirin, west to the river Lao-khe and south to Lao-yang (Liau-yang). North of Ghirin, as in the more southern parts of Ussuri-land and in the most north-easterly parts of Corea, *Ph. karpowi* meets with *Ph. alpherakyi* and its eastern subspecies. South from Lao-yang, on the Lao-tung peninsula, and west from the middle and lower parts of Lao-khe there are no Pheasants at all; further west, near Kalgan, *Ph. kiangsuensis* is found.

The type specimen of this Pheasant was obtained 20 Jan. (2 Feb.), 1901, near Te-lin ( $42^{\circ} 18' 27''$  N. and  $123^{\circ} 44' 45''$  E.), and was sent to me by Mr. A. W. Karpow, from whom I have received some particulars of its distribution in Southern Manchouria. In the Zoological Museum of the Academy of St. Petersburg I have seen two specimens of *Ph. karpowi*—one from Chemulpo (Nov. 1888) and one labelled "Vladivostok" (8/20 Sept., 1882). My type specimen is identical with Corean specimens in the Tring Museum (Mr. Hartert, *in litt.*) and agrees with Taczanowski's description of Corean birds (*l. c.*). Though ranging between the pale *Ph. alpherakyi* and the moderately bright *Ph. kiangsuensis*, the Corean Pheasant is by no means intermediate in appearance, being much darker than the latter and differing from both of them by sharply defined characters, as pointed out in the Table.

### 23. PHASIANUS HOLDERERI Schalow. (*Shensi Pheasant*.)

*Ph. torquatus*: 1877, David et Oustalet, Ois. Chin. p. 409 (pt.: var. "C," Chensi meridional); 1891, Berezowski and Bianchi, Birds of Kan-su Expedition Potanin (Russ.), p. 18 (W. and E. Ordos); 1893, Ogilvie-Grant, Cat. p. 331 (pt.); 1903, Dresser, Man. p. 665 (pt.).

*Ph. holdereri*: 1901, Schalow, J. f. Orn. p. 414 (Min Tschou).

*Ph. holdereri* inhabits the provinces of Shensi and Southern Kan-su (where, however, it is evidently rare) and Ordos.

I cannot trace its limits with certainty. To the north-west and north the deserts of Ala-shan and Mongolia probably form its boundary, though in the St. Petersburg Museum there is a specimen of this Pheasant, labelled "Khara-Khere in Uliassutai, June, 1879" (received from the late Mr. Pewtzow, who, perhaps, had only purchased it near Uliassutai, N.W. Mongolia, a place situated on the caravan-road from Kuku-Khota to Kobdo). In the east the mountains of Shansi (inhabited by *Ph. reevesi*) probably form a boundary between *Ph. holdereri* and *Ph. kiangsuensis*, its eastern representative. West it extends through S. Kan-su, where, however, it must be very rare, as Mr. M. M. Berezowsky did not meet with it, and Mr. Holderer brought home only a single specimen of it from Min-tchow \*. Here it is more or less replaced by the ringless *Ph. strauchi* and *Ph. berezowskyi*. To the south it extends to the banks of the Yang-tsi-kiang, but whether its range coalesces there with those of its southern ally *Ph. gmelini* and the ringless *Ph. decollatus* I cannot say.

The distinguishing characters of this Pheasant (see my synoptical table above, p. 384) were first pointed out by David and Oustalet. I have seen two specimens in the Academy's Museum, one already mentioned and the other labelled "Altan-Khorgoltai, S.W. from Kuku-Khota" (near the north-eastern bend of Hoang-ho). It is most probably only a subspecies of the narrow-collared East-Chinese Pheasants, lacking the superciliaries, and more nearly allied to the grey-winged *Ph. kiangsuensis* than to the somewhat pale-coloured *Ph. gmelini*. Dr. Schalow holds it specifically distinct from his *Ph. torquatus* (not mentioning the locality of this last); but his *Ph. torquatus* is probably a bird from the Amoor (*Ph. alpherakyi*), which is doubtless specifically distinct from *Ph. holdereri* as well as from *Ph. kiangsuensis* and *Ph. gmelini*.

24. PHASIANUS HOLDERERI KIANGSUENSIS, subsp. nov.  
(East-Chinese Pheasant.)

*Ph. torquatus*: 1861, Swinhoe, Ibis, p. 341 (pt., Pe-che-li);

\* One place of this name is situated on the borders of the Amdo Plateau and the Chinese lowland; and there are others in southern Kan-su.

1862, Lamprey, P. Z. S. p. 221 (Shanghai); 1877, David et Oustalet, Ois. Chin. p. 409 (pt.); 1893, Ogilvie-Grant, Cat. pt. 331 (pt.); 1903, Dresser, Man. p. 665 (pt.).

*Phasianus holdereri* similis, coloribus corporis intensis, torque angusta antice sæpe interrupta, macula alba postoculari nulla, uropygio olivascenti-cyaneo, sed pileo cervicisque obscurioribus, ex viridescenti-olivaceo magis fuliginosis, et colli colore metallice viridi diversus; superciliis angustissimis lutescentibus (non autem deficientibus) alarumque tectricibus cærulescenti-canis distinguendus.

*Habitat* in China orientali.

*Ph. kiangsuensis* inhabits Eastern China from the delta of the Yang-tsi-kiang to Kalgan, and extends west at least to the mountains of Shansi and to the Ichang gorges on the Yang-tsi-kiang, where its range overlaps that of *Ph. reevesi*. North it does not reach the Liao-khe valley, on the left side of which the much darker and completely ringed *Ph. karpowi* occurs. In the south its range coalesces with the much paler but most probably only subspecifically distinct *Ph. gmelini*. Several fine specimens of this Pheasant from Shanghai in the Tring Museum have been kindly compared with my specimens of *Ph. karpowi* and *Ph. alpherakyi* by Mr. Rothschild and Mr. Hartert, and in the Academy Museum I have examined a specimen purchased (frozen) by the late Dr. Radde in 1856 at Kiakhta, where it was evidently brought from Kalgan, as Mr. Lorenz (*in litt.*) has received similar specimens thence.

It is evidently only a subspecies of *Ph. holdereri*, as a specimen from Uliassutai (mentioned above) is somewhat intermediate, having much grey on the wing-coverts.

25. PHASIANUS HOLDERERI GMELINI, subsp. nov. (*Gmelin's Pheasant*.)

*Ph. torquatus*: 1861, Swinhoe, Ibis, p. 49 (pt., Hong-Kong); 1862, Swinhoe, Ibis, p. 259 (pt., Foo-chow); 1877, David et Oustalet, Ois. Chin. p. 409 (pt., var. "B," Fokien, Kiangsi); 1893, Ogilvie-Grant, Cat. p. 331 (pt.); 1903, Dresser, Man. p. 665 (pt.).



*Phasianus holdereri* similis, torque angusta antice saepe interrupta, macula alba postoculari nulla, uropygio olivascenti-griseo, pileo olivaceo-viridi rubiginoso minime imbuto; cervice collo fere concolori; alarum tectricibus olivascenti-luteo-griseis, sed superciliis angustissimis albicantibus coloribusque corporis valde pallidioribus (quam in *Ph. alpherakyi* paulo saturatoribus) distinguendus.

*Habitat* in China meridionali.

*Ph. gmelini* inhabits South-eastern China, south to Canton, north probably to Hangchow Bay and the middle Yang-tsi-kiang, where its range coalesces with that of *Ph. kiangsuensis*. Westward it extends through the province of Hoo-nan, but I cannot say whether it passes into the eastern parts of Quei-chow and there meets *Ph. decollatus*.

The distinguishing characters of this bird were pointed out so long ago as 1877 by David and Oustalet under the name "*Ph. torquatus*," but, as I have remarked when treating of *Ph. alpherakyi*, it is impossible to decide what sort of bird Gmelin's *Ph. torquatus* really was. The Museum of the St. Petersburg Academy possesses two specimens of this bird, obtained by the late I. Poliakov in Foo-chow (labelled "20/12 83 N. 71" and "21/12 83 N. 71"). As it is possible that Gmelin's name was partly intended for this bird, I propose to name it *Ph. gmelini*.

26. PHASIANUS DECOLLATUS Swinhoe. (*Swinhoe's Pheasant*.)

*Ph. decollatus*: 1870, Swinhoe, P. Z. S. p. 135 (Chung-king in Sze-chuan); 1877, David et Oustalet, Ois. Chin. p. 411 (pt., cum *Ph. berezowskyi*); 1893, Ogilvie-Grant, Cat. p. 331 (pt.); 1903, Dresser, Man. p. 663 (not shown to belong to the Palæartic Region).

*Ph. decollatus* inhabits the eastern parts of the province of Yunnan, the western parts of Quei-chow, and perhaps the south-eastern parts of Sze-chuan, as the type specimen was purchased in the market of Chung-king, although Mr. Swinhoe tried in vain to get another example.

Mr. Ogilvie-Grant (Handb. G. B. 1897, ii. p. 28) mentions it as existing in "Western Yunnan," but perhaps only by a *lapsus calami*. He states (*l. c.*) also that this bird "extends

from Yunnan " northwards to Southern Shensi, " eastwards to the Sin-ling Mountains, and southwards to Western Quei-chow." But, in fact, the Sin-ling Mountains are not situated east of Southern Shensi, but to the north and west of it, making a boundary between Southern and Northern Shensi and Kansu; while Quei-chow lies not to the south, but to north-east of Yunnan. The ringless Pheasants of Southern Shensi and the Sin-ling Mountains, mentioned by Mr. Ogilvie-Grant (on the authority of David) are not *Ph. decollatus*, as that species was not found by M. Berezowsky even in Northern Sze-chuan, but *Ph. berezowskyi*. The Pheasants of Eastern Koko-nor and Moupin were probably rightly considered by Seebohm to be *Ph. strauchi* (see P. Z. S. 1888, p. 267). The neighbours of *Ph. decollatus* are: *Ph. elegans* on the west, *Ph. guelini* on the east, *Ph. berezowskyi* on the north, and perhaps *Ph. strauchi* on the north-west.

27. PHASIANUS STRAUCHI Przewalski. (*Strauch's Pheasant*.)

*Ph. strauchi*: 1876, Przewalski, Mongolia and the Country of Tanguts (Russ.), ii. p. 119 (Tatung, Buhuk-gol); 1891, Berezowski and Bianchi, Birds of the Kan-su Exped. Potanin (Russ.), p. 18 (pt., *cum Ph. berezowskyi*); 1893, Ogilvie-Grant, Cat. p. 329; 1903, Dresser, Man. p. 663.

*Ph. decollatus*: 1877, David et Oustalet, Ois. Chin. p. 411 (pt.: E. Koko-nor, ? Moupin).

*Ph. strauchi* is found in the mountains of the province of Kan-su up to 10,000 feet. It frequents the wooded parts of the Tatung and Buhuk-gol valleys, the Tatung Mts., and the mountains of the Amdos Plateau (near Si-ning), probably extending south to Moupin. In the north-eastern part of Kan-su, Mr. Berezowsky did not find this species; his specimens from South-western Kan-su (Ma-pua-san, some 50 miles south of Zan-chow) are most probably *Ph. strauchi*, but those from South-eastern Kan-su and Northern Sze-chuan are partly or even wholly *Ph. berezowskyi*. The specimens are in the Museum of Irkutsk, and I have not been able to examine them.

28. PHASIANUS BEREZOWSKYI Rothschild. (*Berezowsky's Pheasant*.)

*Ph. decollatus*: 1877, David et Oustalet, Ois. Chin. p. 411 (pt., S. Shensi); 1893, Ogilvie-Grant, Cat. p. 331 (pt., Sin-ling Mts.).

*Ph. strauchi*: 1891, Berezowski and Bianchi, Birds of the Kan-su Exp. Potanin (Russ.), p. 18 (pt., Hoi-sian).

*Ph. berezowskyi*: 1901, Rothschild, Bull. B. O. C. xii. p. 20 (Hui-Tsian); 1903, Dresser, Man. p. 663 (subsp. of *Ph. strauchi*).

Mr. Rothschild established this species on specimens from Hui-Tsian (or Hoi-Sian), the most easterly part of Southern Kan-su. Most probably the ringless Pheasants of Southern Shensi, including those of the Sin-ling Mountains, belong to it, and perhaps also those of North-eastern Sze-chuan.

Judging from descriptions (for I have seen no specimens) this Pheasant is somewhat intermediate in appearance between *Ph. strauchi* and *Ph. decollatus*, as it is intermediate in range.

29. PHASIANUS ELEGANS Elliot. (*Stone's Pheasant*.)

*Ph. elegans*: 1870, Elliot, Ann. & Mag. N. H. vi. p. 312 (Yun-ling Mts.); 1893, Ogilvie-Grant, Cat. p. 329; 1898, Oates, Game B. Ind. i. p. 299.

*Ph. sladeni*: 1870, Elliot, P. Z. S. pp. 404, 408; 1871, Anderson, P. Z. S. p. 214 (W. Yunnan); 1877, David et Oustalet, Ois. Chin. p. 411.

*Ph. elegans* is restricted to the mountains of Western Sze-chuan and Western Yunnan in China, and to the Northern Shan States of Burmah, where it extends as far south as 23° 45' N. lat.

Its eastern neighbour is *Ph. decollatus*, and its northern neighbour is *Ph. strauchi*. Messrs. Bianchi and Berezowsky state (*l. c.*) that some specimens of *Ph. strauchi* have so much green on the breast and chest (though not confluent with the green on the lower throat) that they seem in this respect to be intermediate between that species and *Ph. elegans*.

30. PHASIANUS VLINGALII Przewalski. (*Tsaidam Pheasant*.)

*Ph. vlingalii*: 1876, Przewalski, Mong. and Tang. (Russ.), p. 116; 1893, Ogilvie-Grant, Cat. p. 330; 1899, Kozlow, Res. I. R. G. S. Exped. C. As. (Russ.), ii. pp. 198, 218, 286; 1903, Dresser, Man. p. 664.

The range of *Ph. vlingalii* is restricted to the eastern part of Tsaidam with the Valley of Bahin-hol (Tibetan, not that of Koko-nor) and Dsuhyn-hol.

The Southern Koko-nor Mts. and the Nan Shan form its northern boundary, on the other side of which one of the Ring-Pheasants (*Ph. satscheuensis*) occurs while on the east its close neighbour is *Ph. strauchi*. The green colour of the chest in one specimen of the latter from South-western Kansu (Ma-pua-san) mentioned by Messrs. Berezowsky and Bianchi may shew some affinity of *Ph. strauchi* to *Ph. vlingalii*, but not necessarily to *Ph. elegans*.

31. PHASIANUS VERSICOLOR Vieillot. (*Green Pheasant*.)

*Ph. versicolor*: 1825, Vieillot, Gal. Ois. ii. p. 23, pl. 205; 1890, Seebohm, Bird Jap. Emp. p. 370; 1893, Ogilvie-Grant, Cat. p. 334; 1903, Dresser, Man. p. 664.

*Ph. diardi*: 1830, Temminck, Pl. Col. v.

*Ph. versicolor* inhabits the Japanese Islands except Yezo. Those who consider it to be only a "climatic variety" of the strikingly different *Ph. colchicus* should be reminded that the climatic conditions of Japan and the lower Rion basin in Transcaucasia are somewhat alike, so that Japanese plants are easily acclimatised in the latter.

32. PHASIANUS SOEMMERRINGI Temminck. (*Copper Pheasant*.)

*Ph. soemmerringi*: 1830, Temminck, Pl. Col. v. nn. 487, 488; 1890, Seebohm, Birds Jap. Emp. p. 370; 1893, Ogilvie-Grant, Cat. p. 336 (pt.); 1903, Dresser, Man. p. 667.

*Ph. soemmerringi* inhabits the Kiu-Siu Isl. of Japan. It has been obtained also at Simoda on Hondo (Nippon), but Seebohm supposes that this was a tame bird.

33. PHASIANUS SOEMMERRINGI SCINTILLANS Gould. (*Gould's Pheasant*.)

*Ph. (Graphophasianus) scintillans*: 1866, Gould, Ann. &

Mag. N. II. xvii. p. 150 (Yokohama) ; 1890, Seebohm, Birds Jap. Emp. p. 370 ; 1903, Dresser, Man. p. 667 (subsp. of *Ph. soemmerringi*).

*Ph. soemmerringi* : 1893, Ogilvie-Grant, Cat. p. 336 (pt.).

*Ph. scintillans* mainly inhabits Hondo (Nippon) in Japan, but occurs also on Kiu-Siu.

I suppose this Pheasant to be a mere subspecies of the Copper Pheasant, as it is stated that every intermediate stage between the two forms occurs (Ogilvie-Grant, Handb. Game B. 1897, ii. p. 36). But such specimens as I have seen are strikingly different, and even the females quite recognisable, though Seebohm and Ogilvie-Grant treat them as indistinguishable. The female of *Ph. soemmerringi* has the tail narrowly but distinctly barred with white, blackish brown, and sandy rufous, but the female of *Ph. scintillans* has the central tail-feathers quite indistinctly barred, the other tail-feathers being bright rufous with a black subterminal and a broad white apical band.

34. PHASIANUS SOEMMERRINGI IJIMÆ Dresser. (*White-rumped Pheasant*.)

*Ph. ijimæ* : 1902, Dresser, Ibis, p. 656 (prov. Hiuga) ; 1903, Dresser, Man. p. 668 (subsp. of *Ph. soemmerringi*).

*Ph. ijimæ* occurs in the provinces of Kiuga and Osumi in the south-eastern part of Kiu-Siu Island in Japan.

I give it here only subspecific rank, as Mr. Dresser has himself done, though I am not aware that intermediate specimens have been found\*.

35. PHASIANUS REEVESI Gray. (*Reeves's Pheasant*.)

*Ph. reevesi* : 1829, J. E. Gray in Griff. ed. Cuv. R. A. iii. p. 25 ; 1877, David et Oustalet, Ois. Chin. p. 413 ; 1893, Ogilvie-Grant, Cat. p. 337.

*Ph. veneratus* : 1830, Temminck, Pl. Col. v. n. 485.

*Syrmaticus reevesi* : 1832, Wagler, Isis, p. 1229.

This splendid Pheasant, not mentioned in Dresser's 'Manual,' inhabits the mountains of the central parts of Northern and Middle China. It is found in the western parts of the

\* Mr. Dresser has lately informed me that Prof. Ijima has no intermediate specimens, and that the ranges on Kiu-Siu are quite different.

provinces of Pe-che-li (Chji-li), Shansi, the south-eastern part of Shensi, the western part of Honan, the northern part of Hoope, and the north-eastern part of Sze-chuan. It does not extend into Western Sze-chuan, but on the other side of the Yang-tsi-kiang it ranges to Kiu-kiang.

This short revision of the genus *Phasianus* is intended to prove that all the species have very limited ranges, as indeed is only natural in such variable and sedentary birds, and that they are more or less differentiated into true species or geographical subspecies, and are not merely climatic or local varieties that frequently merge into one another, as one would be apt to think on studying semi-domesticated mongrels. Furthermore it may shew that too often the areas of these species are not sufficiently known, and that this ignorance is only the natural consequence of a long-prevailing practice of lumping together closely allied, and sometimes even perfectly different, forms under one name, and of considering as "well known" and "not worth collecting" such forms of animals, though our knowledge of them is really very scanty.

I wish to express my warmest thanks to all who have helped me in preparing this article, namely, Mr. S. N. Alpheraky, of St. Petersburg, for the loan of specimens and printed works and for many friendly counsels; Dr. V. L. Bianchi, of the Museum of the Academy of St. Petersburg, for most kindly helping me and Mrs. Wera V. Buturlin in our studies of specimens and literature; Dr. Ernst Hartert, of Tring, for kindly comparing my specimens with typical specimens; Capt. A. W. Karpow, of Manchooria, for sending me specimens and interesting notes; Mr. Th. C. Lorenz, of Moscow, for some important notes; Baron H. v. Loudon for kindly bringing me for inspection numerous specimens from his Museum; the Hon. Walter Rothschild for kindly comparing my skins with types in the Tring Museum; and last, but not least, Prof. V. V. Zalusky, Director of the Museum of the Academy of St. Petersburg, for granting me access to the rich collections under his care.

Wesenberg, Esthonia, Russia,  
April 17th, 1904.